Management Advisory Committee Charges to the Technical Working Group

23 December 2020

Issue: The AECOM hydraulic model report has raised concerns which can be mitigated

- Inclusion of recreational features and other modeling assumptions appear to cause harmful interference for most of the alternatives which is a non-starter for the project review and permitting process.
  - When AECOM modeling results predicted increased water surface/harmful interference they should have contracted River Restoration in order for them to make adjustments of in river features to avoid harmful interference. This direction was agreed upon at the December 19, 2019 Grand River Design Coordination Meeting as documented in the USACE GR decision log.
  - The model outputs reported in the Hydraulic Analysis Report – November 22, 2020 utilize data from the December 2019 model, however based on comments received, river feature #5 has been relocated further downstream by River Restoration, but was not accounted for in the 30% design, therefore no model results evaluating the new location have been provided.
  - Previous model outputs from River Restoration predicted no rise in water surface elevation, however AECOM modeling that included the December 2019 River Restoration model results predicts increases in water surface elevation. These differences in findings may be a result of the independence of the design efforts.
- USFWS and GLFC are evaluating lack of velocities prohibitive to upstream movement of sea lamprey in most alternatives which will need to be addressed.
- Fish passage interests have been incorporated into the design of the in-river features provided by RRO but have not yet been evaluated for the upstream reach. The earlier that these interests are evaluated and addressed in the design of upper reach in-river features, the better the outcome that will be reached.

MAC charges to the TWG:

- Jointly identify potential design and modeling approaches that may contribute to harmful interference.
- Develop and deploy a timeline for River Restoration to provide a complete proposed model to be incorporated into the upper reach features design to facilitate evaluation and successful project review and permitting – disparate model versions must be reconciled and conformed into a consensus model for both NEPA and permitting purposes.
  - Develop criteria for accepting a model that is highly unlikely to require further substantial modification.
  - This effort lays the groundwork for the following charge.
- Develop a mutually agreed upon a time-constrained iterative process, defined by TWG, to be used by AECOM and River Restoration to work together to refine and finalize the design to implement an **"apples to apples"** approach and ensure that harmful interference is minimized prior to evaluation of EIS alternatives – importantly and to eliminate bias, any alternative with in-river features that does not meet criteria outlined should be fully re-evaluated.
- Collaborate to ensure that upstream reach fish passage interests are explored and included in the design of upper reach in-river features.

- Collaborate to address the issue of lack of velocities prohibitive to upstream movement of sea lamprey including modeling various gate operations – identification of potential risks must be completed.
- Develop and implement an explicit process for managing decisions and actions that do not require a change order to avoid future misalignment of communications – especially when related to direction to resolve the issue of changing model versions.
- Remain cognizant of the fact that every change to AECOM's Scope of Work results in timeline delays and additional costs.